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ABSTRACT

This three-part report summarizes data collected during fiscal year 1978-79 in a longitudinal study of 7,957 students at 15 California community colleges. Part I compares findings for vocational and non-vocational students in terms of demographic characteristics, educational objectives, academic achievement during the 1978-79 school year, employment status, and student evaluation of college services. Selected findings in this section reveal that while there were few demographic differences between vocational and non-vocational students, vocational students signed up for and completed slightly more units and were more likely to complete their objectives for attending college. Part II compares day and evening students with respect to the same variables, demonstrating that evening students were older, were more likely to be married and have dependents, and had a higher degree of persistence. Part III discusses: (1) the feasibility of using sampling techniques to meet state reporting requirements; (2) the representation of economically and educationally disadvantaged, displaced homemakers, Limited-English-Speaking, ethnic minorities, persons in non-traditional curricula, and physically handicapped in the study sample and their characteristics; and (3) 15 student prototypes designed to provide a more complete picture of the heterogeneous student body served by the community colleges. (JP)

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STATEWIDE LONGITUDINAL STUDY

Report on Academic Year 1978-1979

Part II - Spring Results

Funded by the Chancellor's Office
California Community Colleges
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STATEWIDE LONGITUDINAL STUDY

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REPORT SUMMARY FOR PART II

This report is an addendum to Part 1 of the Statewide Longitudinal Study Report for fiscal 1978-1979. There are four general sets of objectives for the study.

1. To give detailed descriptions of community college students, including a comparison of vocational and nonvocational students.

2. To test the feasibility of using a small sample of students for statewide reporting, collecting data from telephone interviews and student records.

3. To provide detailed information about seven special groups of students: economically disadvantaged, educationally disadvantaged, displaced homemakers, Limited-English-Speaking, ethnic minorities, persons in nontraditional curricula, and physically handicapped.

4. To develop and define prototypes of community college students that will permit a description of the educational activity in which the California Community Colleges are engaged.

This report has three content sections:

1. A comparison of vocational and nonvocational students.

2. A comparison of day and evening students.

3. A summary of data collected in fiscal 1978-1979, and a description of student prototypes speculated to comprise the student population of California Community Colleges.

COMPARISON OF VOCATIONAL AND NONVOCATIONAL STUDENTS

Few demographic differences were found between vocational and nonvocational students. There was a slightly higher percentage of women among nonvocational students, hypothesized to be the result of the large proportion of vocational offerings in the male-dominated fields.

Though little difference was observed in grade point average, vocational students appeared to be more productive in earning credit than nonvocational students. This finding confirms a trend observed in the Pierce College Longitudinal Study (Sheldon & Hunter, 1978). In addition, vocational students tended to complete their objectives more often, had fewer conflicts with other schools, did not find their jobs at odds with their school attendance as much, valued their jobs over school attendance more, and had a better understanding of their college goals than nonvocational students. Vocational students also tended to have higher skill level and better-paying jobs than nonvocational students.

COMPARISON OF DAY AND EVENING STUDENTS

Day and evening students are two different populations. Evening students are older, are more likely to be married and have dependents, and have achieved more academically than day students. In addition, evening students tended to have higher skill level jobs and higher wages than day students.

More day students tended to favor Preparation for Transfer and Pre-Employment training than evening students. The latter concentrated more on Inservice Training, Retraining (for a new or an extra career) and Self-Enrichment than day students.

Evening students tended to be more stable in terms of maintaining courses than day students, but also tended to take fewer courses. Evening students attempted and passed fewer courses than day students. This last is seen more as a function of lack of interest in college credit than poor scholarship, since interview data indicates that older students tend to equate course outcomes with raises and promotions more than day students do.

STUDENT PROTOTYPES

Fifteen emerging student prototypes were tentatively identified. These prototpyes are based on definitions that include both student motivation and student performance. A committee of the consortium that manages the study is in-

vestigating the validity of the prototypes. It is expected that students in the sample will be tentatively categorized according to this system during Spring 1980 data collection.

The prototypes include; "Scholars," whose goal is to transfer to a four-year college; different vocational prototypes based on goals of minimal work skills, full work skills, extra job/second career work skills, and upgrading of current job skills; and self-enrichment prototypes whose goals include learning vocational skills for hobby reasons or obtaining cultural information. There are also two prototypes hypothesized to attend college for inappropriate reasons, namely to engage in team sports and to obtain financial aid funds.

The prototype concept will be used to provide a better explanation of the services that California Community Colleges provide to their students than is presently available. In addition, the prototype concept will be used to make suggestions for methods of judging outcomes of instruction which provide better information than a simple record of course completion and grade point average. The evidence indicates that, if a sufficient percentage of students are uninterested in grades or college credit, a different measure of instructional success must be devised if community colleges are to avoid unnecessary and unfair criticism.

FINAL REPORT STATEWIDE LONGITUDINAL STUDY 1978-1979 PART 2

INTRODUCTION

This paper is an addendum to Statewide Longitudinal Study, Academic year 1978-1979, Part 1. (Hunter, R. and Sheldon, M.S., 1979). That document gives the background of the study and a detailed list of the goals and objectives as stated in the initial research proposal.

There were three general sets of objectives:

1. To give detailed descriptions of community college students, including a comparison of vocational and nonvocational students.

2. To test the feasibility of using a small sample of students for statewide reporting, collecting data from telephone interviews and student records.

3. To provide detailed information about seven special groups of students: economically disadvantaged, educationally disadvantaged, displaced homemakers, Limited-English-Speaking, ethnic minorities, persons in nontraditional curricula, and physically handicapped.

After one and one half years of participation in the study, the project management and consortium have evolved a fourth objective.

4. To develop and define prototypes of community college students that will permit a description of the educational activity in which the California Community Colleges are engaged.

Having carefully scrutinized data from a representative sample of California community college students who initially enrolled in Fall 1978, we are convinced that the traditional description of the educational role of the community college as a "two-year college" is largely inaccurate. Only 27% of the beginning students expected to attend classes for only two years. Few of our students transfer to four-year colleges as juniors after just two years of study. Less than 30% of the nonvocational students completed 12 units the first semester. Few of our students follow a two-year vocational curriculum, graduate after two years with a certificate or degree, and take jobs in business or commerce. Only about 31% of vocational students finished 12 units or more in Fall 1978.

This report has three content sections. The first compares vocational and nonvocational students. The second compares day and evening students. The third summarizes the data collected during the academic year 1978-1979, and speculates about the student prototypes referred to in the fourth general objective. These content sections will contain many of the 156 variables collected on our student sample during Fall 1978 and Spring 1979. Of the 156, 9 are used for internal bookkeeping (e.g., College Identifi-

cation, Student Identification), and 54 deal only with the special groups of students. These variables are listed in Table 1 with brief definitions.[1] For ease of reading, names of variables will be printed in capital letters. Data were gathered from two sources; student records, and telephone interviews. Information from the interviews is more intriguing, more difficult to categorize, and yields more important information than that from student records. Of particular interest are the evaluative questions. It is from the students' and former students' answers to structured questions about their feelings, judgments, and aspirations that one can best learn about the nature of the community college educational experience.

All data are presented in tabular form giving the frequency count (#) and percent (%) falling in each interval. Measures of central tendency are reported when applicable, and are computed from raw data rather than grouped data. Tests of significance of difference have not been computed because, with Ns of several thousand and small variances, inconsequential differences could easily be "statistically significant." When the word "significant" is used, it is synonymous with noteworthy, of consequence, or meaningful.

The reader will find that the number of sample students varies from table to table. These discrepancies arise from the usual difficulties encountered in conducting this type

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[1] Lenghty, detailed, operational definitions for each variable were published in the Interview guides and manuals supplied to the college coordinators for each data collection period.

of study. The reasons are briefly described below. They have their roots in the type of communication required in this study, and the innumerable ways that instructions about data collection and coding can be interpreted.

Data in this study have been collected on 15 campuses, by almost 100 different persons. Instructions for data collection were originated by the consortium, written in the state project office, sent to project coordinators on the 15 campuses, and communicated to the telephone interviewers by the coordinators. Each element of the communication chain is a potential source of error; the consortium, the project management, the coordinators, and the interviewers. Further, coders and keypunch operators are not blameless in the production of inaccurate data.

Procedures have been set up for identifying and correcting some of the errors. However, more than 1,300,000 items of information were collected during the academic year 1978-1979. Correcting this volume of data takes time.

The errors fall into three classes: mechanical errors, illegal character errors, and errors of logic. The first class contains errors in keypunch or card duplication. The second class contains mistakes made in coding of variables; e.g., if the code for Male is 1, for Female 2, any other code is an illegal character. The third class contains mistakes made that concern more than one variable; e.g., coding an 18-year-old male as a DISPLACED HOMEMAKER is an error in logic.

Computer programs have been developed for the identi-

fication and correction of these mechanical errors. Error identification sheets are mailed to each campus, and the participating colleges return the same sheets with the errors corrected. This process is continuous. The data bank, semester to semester, is in a continual process of improvement.

TABLE 1: FALL 1978 AND SPRING 1979 VARIABLES

FALL 1978

1. SEMESTER
2. COLLEGE
3. STUDENT CATEGORY
4. FILE
5. SUBJECT REACHABLE?
6. SUBJECT COOPERATIVE?
7. STUDENT ENROLLMENT GROUP
8. SEX
9. AGE
10. CLASS HOURS
11. 1ST REASON FOR WITHDRAWING
12. 2ND REASON FOR WITHDRAWING
13. 3RD REASON FOR WITHDRAWING
14. UNITS ATTEMPTED
15. COURSES ATTEMPTED
16. UNITS AT CENSUS
17. LAST SCHOOL ATTENDED
18. TYPE OF SCHOOL
19. HIGHEST GRADE
20. NUMBER YEARS OUT OF SCHOOL
21. EXPECTED LENGTH AT COLLEGE
22. COLLEGE OBJECTIVES
23. EMPLOYMENT TRAINING
24. MAJOR STATED IN INTERVIEW
25. RECORDED MAJOR
26. SAM MAJOR
27. NONTRADITIONAL MAJOR?
28. NONTRADITIONAL MAJOR PROBLEM
29. MARITAL STATUS
30. NUMBER OF DEPENDENTS
31. OCCUPATIONAL STATUS
32. HOURS OF EMPLOYMENT
33. WORKING STUDENTS HOURLY WAGE
34. LAST YEAR'S OCCUPATION
35. HAVE PHYSICAL HANDICAP?
36. TYPES OF HANDICAP
37. DIFFICULTIES CAUSED/HANDICAP
38. FINANCIAL DISADVANTAGE
39. KNOWLEDGE OF HELP
40. FINANCIAL AID
41. EDUCATIONAL DISADVANTAGE
42. KNOWLEDGE OF HELP
43. LES/NES
44. NATIVE LANGUAGE
45. LANGUAGE PROBLEM
46. ETHNICITY
47. DISCR./MINORITY PROBLEM
48. DISPLACED HOMEMAKER
49. DISPLACED HOMEMAKER PROBLEM
50. PERCEIVED COUNSELING NEEDS

SPRING 1979

51. CARD
52. COLLEGE
54. INTERVIEWER
55. FALL ENROLLMENT
56. FALL 78 UNITS SIGNED UP FOR
57. FALL 78 UNITS PASSED
58. FALL 78 COURSES SIGNED UP FOR
59. FALL 78 COURSES PASSED
60. FALL 1978 GPA
61. SAM MATRIX CODE
62. SPRING ENROLLMENT GROUP
63. SPRING 79 CLASS HOURS
64. SPRING 79 COURSES SIGNED UP FOR
65. SPRING 79 UNITS SIGNED UP FOR
66. SPRING 79 COURSES AT CENSUS
67. SPRING 79 UNITS AT CENSUS
68. SPRING 79 RECORDED MAJOR 4 COL
69. SPRING 79 SAM MAJOR 4 COL
70. VOCATIONAL STUDENT?
71. SUBJECT REACHABLE
72. CREDIBLE INTERVIEW?
73. SPRING 79 HOURS OF EMPLOYMENT
74. FALL TO SPRING SALARY CHANGE
75. SALARY AMOUNT
76. SAME JOB?
77. JOB CODE
78. JOB RELATED?
79. CREDIT A REASON?
80. GOAL ATTAINMENT
81. COUNSELING?
82. RATE COUNSELING
83. STUDY HELP?
84. HOW STUDY HELPED
85. STILL NO HANDICAP
86. HANDICAP DEFINITION
87. HANDICAP PROBLEMS
88. STILL NO HANDICAP PROBLEMS
89. WRITTEN RESPONSE TO 88
90. HANDICAP PROBLEM SOLVED?
91. WRITTEN RESPONSE TO 90
92. NEW PROBLEMS
93. WRITTEN RESPONSE TO 92
94. STILL NO MIN. PROBLEM
95. WRITTEN RESPONSE TO 94
96. MIN PROBLEM SOLVED?
97. WRITTEN RESPONSE TO 96
98. NEW MIN. PROBLEMS
99. WRITTEN RESPONSE TO 98
100. FINANCIAL AID HELP?
101. SPRING FINANCIAL AID?

TABLE 1: (cont.)

SPRING 1979 (CONT'D.)

102. KINDS OF AID?
103. ED.DIS.PROBLEM SOLVED?
104. WRITTEN RESPONSE TO 103
105. ED.DIS. NOW?
106. CARD
107. COLLEGE
109. MARITAL STATUS
110. CHANGE IN DEPENDENTS
111. WAS D.H., STILL NO PROBLEMS?
112. WRITTEN RESPONSE TO 111
113. FALL D.H., STILL HAVE PROBLEM?
114. WRITTEN RESPONSE TO 113
115. POTENTIAL D.H., NOT WORKING?
116. NOW A D.H., HAVING PROBLEMS?
117. WRITTEN RESPONSE TO 116
118. ARE YOU NOW A D.H.?
119. NOW A D.H., HAVING PROBLEMS?
120. WRITTEN RESPONSE TO 119
121. STILL NO NON TRAD PROBLEMS
122. WRITTEN RESPONSE TO 121
123. NON TRAD PROBLEM SOLVED
124. WRITTEN RESPONSE TO 123
125. LES/NES PROBLEM SOLVED?
126. WHY NOT ENROLLED?
127. MORE COURSES?
128. 1ST REASON FOR DROPS
129. 2ND REASON FOR DROPS
130. 3RD REASON FOR DROPS
131. NEED COUNSELNG?
132. REASON FOR ATTENDING
133. WHY CHANGE GOALS?
135. COMFORT IN INDECISION
136. INFO TO HELP DECISION
137. JOB IN TRAINING FOR
138. STATED MAJOR
140. WHY CHANGE MAJORS?
141. LIKE ABOUT PROGRAM?
142. DISLIKE ABOUT PROGRAM?
143. APPRENTICE?
144. TIME OFF FOR CLASSES
145. LICENSE MAINTENANCE?
146. NON TRAD MAJOR PROBLEM
150. CLASSROOM INSTRUCTION
141. HELP OUTSIDE CLASS
152. PROGRAM PLANNING ASSIST.
153. VOC. INFO. AVAILABLE
154. GENERAL OPINION OF COLLEGE
156. FALL UNITS ATTEMPTED

Pro tempore, responses in a given data category that are regarded as erroneous are coded "M" (Missing Data) until such time as they can be corrected. Because these errors are apparently random in nature, leaving out erroneous data need not negate the usefulness of the data presented. To paraphrase Robert Hutchins, "These are not good data about community college students. They are just the best there are."

COMPARISON OF VOCATIONAL AND NONVOCATIONAL STUDENTS

This section deals with a comparison of vocational and nonvocational students. To make such a comparison, it was first necessary to determine the criteria upon which to separate the two groups. There were five possible criteria:

1. Recorded major - Data for this variable were taken from records of the students' declared majors at the time of admission. About two-thirds of the sample students' majors were recorded as Undecided, Self-Enrichment, Missing Data, or General Transfer. At the time of admission, many students make a spur-of-the-moment decision that bears little resemblance to the courses they take or their eventual educational goals.

2. Interview major - During the first interview, each reachable subject was asked "What is your major?" More than 50% used the categories of Undecided, Self Enrichment, and General Transfer.

3. Job for which in training - Each reachable subject was asked, "What job are you in training for?" Again, more than one-half used the noncommittal categories stated above.

4. College objectives - Each student interviewed was asked, "What are your main reasons for attending college?" Multiple answers were permitted. Of the more than 30% giving "General Transfer" as their only objective and 25% giving "Self-Enrichment, many were enrolled in vocational courses. Many of the remaining gave multiple objectives making classification into vocational and nonvocational difficult.

5. Student Accountability Model (SAM) Major - Over the last five years, California Community Colleges have been engaged in developing procedures by which the state could have accurate data on its vocational students. This project, known as the Student's Accountability Model, (SAM) is described in detail by Gold (1979). Early in the SAM project, it was determined that students' recorded majors and declared majors had little to do with the nature of the courses they took. Consequently, it was decided to assign a major on the basis of the courses each student enrolled in and passed. To do this each college assigned a priority letter to each course it offered:

   A. An apprentice course.
   B. A high-level vocational course enrolled in only by majors in that discipline.

C. A vocational course that may include some nonmajors.

D. A beginning vocational course.

E. A nonvocational course.

A student, when not in attendance, was assigned to a spot on a 4 x 6 matrix. The cell in which he falls depends on how many courses he has passed and the priority of the courses. (See Gold, 1979, page 24). For the Statewide Longitudinal Study, the SAM major was used to classify a student as vocational or nonvocational.

Said another way, all students who enroll in any level of vocational courses are, for this project, considered vocational students. The remainder, regardless of the number of courses in which they enroll or their purposes for attending college, are considered nonvocational. Using this convention will lead to some misclassifications; e.g., the student who is in a transfer program but takes a course in typing or auto mechanics will be classified as vocational. However, any alternative system for classification of students as vocational or nonvocational has a greater probability of giving fallacious numbers and proportions.

This section compares and contrasts vocational and nonvocational students on variables having to do with demographics, college, and jobs. Of the 7,957 students in the sample at the beginning of Fall 1979, 2,616 were classified as vocational and 2,005 as nonvocational. The remaining 3,336 were not classified, either because they were unreachable and/or non-enrollees during one or both semesters/quarters

of the academic year 1978-1979, or because the data required to make the classification were not available when the information was aggregated and analyzed.

DEMOGRAPHIC VARIABLES

Information on five demographic variables is given in this section: AGE, SEX, ETHNICITY, MARITAL STATUS, and NUMBER OF DEPENDENTS.

Table 2 gives the AGE distributions and measures of central tendency for vocational and nonvocational students.[1] The table shows that there is little difference between the two groups. The vocational students are slightly younger, but not significantly so.

Table 3 gives the number and proportion of each group for male and female. Both groups have significantly more women than men. However, the proportion of women is greater for the nonvocational students (42% male, 58% female) than for the vocational (46% male, 54% female). This discrepancy was not anticipated, and the reasons for it must be speculative. Perhaps the colleges offer more vocational programs that are traditionally associated with men; e.g., all the industrial arts, electronics, and computer science courses, than the number traditionally associated with women; e.g., office administration and nursing.

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[1]Data for this variable were collected in September, 1978. All sample students are more than a year older at the time of this publication.

Table 2

Age

Age	Vocational #	Vocational %	Nonvocational #	Nonvocational %
15-19	1,302	50	974	49
20-24	459	18	337	17
25-29	257	10	208	11
30-34	184	7	151	8
35-39	135	5	95	5
40-44	90	4	65	3
45-49	73	3	41	2
50-54	41	1.5	38	2
55-59	39	1.5	31	1
60-64	9	.5	26	1
65-Highest	13	.5	23	1
TOTAL	2,602		1,989	
MEAN		24.7		25.3
MEDIAN		19.5		20.7
MODE		18.0		18.0

Table 3

Vocational Status

	Vocational	Nonvocational
Male	1,191	830
	46%	42%
Female	1,415	1,159
	54%	58%
TOTAL	2,606	1,989

Table 4 gives the distribution of ethnic backgrounds of the two groups. There are no meaningful differences in the proportions from each ethnic group.

This is a heartening finding. Though there may be disproportionate ethnic distributions within specific programs, over all, the proportion of minority students classified vocational was little different from those that were nonvocational.

Table 4

Ethnicity

Ethnicity	Vocational		Nonvocational	
	#	%	#	%
American Indian	21	1	14	1
Asian	158	6	130	7
Black	153	6	133	7
Hispanic	307	12	263	14
White	1,788	72	1,332	70
Other	72	3	38	2
TOTALS	2,499		1,910	

Tables 5 and 6 give data on marital status and number of dependents, respectively. Once again, there are inconsequential differences between the groups.

Table 5

Marital Status

Marital Status	Vocational		Nonvocational	
	#	%	#	%
Never Married	1,669	66	1,253	66
Married	673	27	532	28
Separated	30	1	21	1
Divorced	123	5	78	4
Widowed	10	1	18	1
TOTALS	2,505		1,893	

Table 6

Number of Dependents

Dependents	Vocational		Nonvocational	
	#	%	#	%
0	1,933	79	1,529	81
1	179	7	146	8
2	167	7	108	6
3	114	5	56	3
4	37	2	33	2
5	17	.5	7	.4
6	10	.4	9	.5
7	3	0	6	0
8	2	0	4	0
TOTALS	2,462		1,898	

COLLEGE VARIABLES

This section describes and compares vocational and nonvocational students on academic variables; units and courses, reasons for attending college, dropping classes and dropping school, and students' evaluations of the college and the progress they made toward their goals.

During both the Fall 1978 and Spring 1979 interviews each student was asked "What are your main reasons for attending college?" Multiple answers were permitted. The aggregated data for both semesters appear in Table 7.

This table contains expected discrepancies; e.g., almost 60% of the vocational students chose pre-employment training, inservice training, and retraining, while less than 25% of the nonvocational students make these choices.

It may seem contradictory that about a quarter of nonvocational students gave vocational reasons for attendance and that more than 30% of the vocational students gave "Preparation for Transfer" as a reason for attending college. This arises from the use of the SAM major to differentiate between vocational and nonvocational students. Many students in the vocational sample; e.g., in Business, Accounting, Conputer Science, or Architecture courses (all defined as vocational), may plan to transfer to a four-year college and earn a B.A. degree. Many students whose courses would indicate they are attending college for personal enrichment or to finish their general education lower division courses for transfer, state in the interview that their main reason for

enrolling is to acquire or improve job skills. Table 7, more than any other, indicates the merit in using a SAM major to determine whether or not a student is vocational, rather than using the major recorded at admission or declared in a telephone interview.

Table 7

Reasons for Attending College

	Fall 1978 Vocational		Fall 1978 Nonvocational	
	#	%	#	%
Pre-employment Training	1,010	42	385	20
Preparation for Transfer	713	30	813	43
Inservice Training	329	14	116	6
Retraining	83	3	43	2
Self-enrichment	450	19	580	31
Undecided	183	8	175	9

	Spring 1979 Vocational		Spring 1979 Nonvocational	
Pre-Employment Training	565	42	154	16
Preparation for Transfer	458	34	501	51
Inservice Training	118	9	45	5
Retraining	64	5	31	3
Self-enrichment	253	19	258	26
Undecided	42	3	37	4

Table 8 shows a comparison of the vocational and nonvocational students in terms of college UNITS SIGNED UP FOR, ATTEMPTED, and PASSED.[1] Over all, vocational students signed up for, attempted, and passed slightly more units than nonvocational students. Though these differences are not startling, they represent a trend first observed during the pilot study for this project (Sheldon and Hunter, 1978). Sheldon and Hunter found that, measured by the ratio of classes passed to classes enrolled in, vocational students were significantly more productive than nonvocational.

The bottom row of the frequency distribution gives the number and proportion of students having zero units. There is a significant difference between the vocational and nonvocational student: 13% and 21%, respectively. These data, combined with those given in Table 9, (FALL ENROLLMENT GROUP), substantiate the earlier finding. Twelve percent of the vocational students withdrew from all courses, and 45% maintained all courses. The comparable numbers for nonvocational students are 18% and 43%, respectively. (The discrepancies between Table 9 "Withdrew all Units" and Table 8 "Zero Units" is due to the difference in the number of students for whom data were available).

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[1]UNITS SIGNED UP FOR includes all the units associated with all the courses in which the student enrolled--regardless of the outcome. (Two of the consortium colleges were unable to supply accurate data on this variable because their student records were purged of courses from which students withdrew early in the semester). UNITS ATTEMPTED includes only the units associated with courses for which the student received a grade of A, B, C, D, or F. UNITS PASSED includes all units associated with courses the student passed including A, B, C, D, Pass, Credit, or other symbols used by the participating colleges.

Table 8

Units Signed Up For, Units Attempted, Units Passed

	Vocational						Nonvocational					
Units	Signed		Attempted		Passed		Signed		Attempted		Passed	
	#	%	#	%	#	%	#	%	#	%	#	%
1-2	128	5	139	6	172	8	200	10	183	13	223	15
3-5	501	19	542	25	544	25	421	21	382	27	406	27
6-8	370	14	412	19	399	18	246	12	223	16	233	15
9-11	315	12	371	17	371	17	200	10	197	14	217	14
12-14	557	21	395	18	413	19	385	19	238	17	278	18
15-17	415	16	241	11	229	11	289	15	134	9	130	9
18-20	195	8	58	3	40	2	165	8	45	3	32	2
21-Highest	118	5	27	1	6	.3	81	4	36	3	6	0
0(Missing)	3	(0)	261	(10%)	345	(13%)	8	(0%)	386	(19%)	428	(21%)
	2,599		2,185		2,174		1,987		1,438		1,525	
MEAN	10.8		8.8		8.4		10.1		8.3		7.6	
MEDIAN	11.3		8.5		8.2		10.2		7.3		6.8	
MODE	3.0		3.0		3.0		3.0		3.0		3.0	

Table 9

Fall Enrollment Group

Fall Enrollment Group	Vocational		Nonvocational	
	#	%	#	%
Withdrew Some Units	1,013	39	779	39
Withdrew All Units	317	12	352	18
Maintained All	1,260	48	858	43
	2,590		1,989	

Table 10 represents the number of COURSES SIGNED UP FOR and PASSED by the two groups. As with the data on UNITS, this table indicates that vocational students are more productive than nonvocational. Only 14% of vocational students completed zero courses while 21% of the nonvocational students fell into that category. The measures of central tendency indicate a similar conclusion. Overall, those students categorized as vocational attend and complete more units and courses than the nonvocational.

Table 10

Courses Signed Up For, Courses Passed

Courses	Vocational				Nonvocational			
	Signed		Passed		Signed		Passed	
	#	%	#	%	#	%	#	%
0	1	0	339	14	6	0	420	21
1	518	20	605	24	469	23	506	26
2	386	15	382	14	294	15	240	12
3	270	10	326	13	193	10	205	11
4	339	13	316	13	250	13	215	11
5	385	15	300	12	283	14	214	11
6	300	12	146	6	213	11	85	4
7	190	7	70	3	142	7	40	2
8	125	5	36	1	72	4	14	1
9	47	2	11	.4	40	2	9	.5
10+	49	2	7	0	42	2	8	.4
TOTALS	2,610		2,518		2,004		1,956	
MEAN		4.0		2.7		3.9		2.4
MEDIAN		3.9		2.4		3.7		1.7
MODE		1.0		1.0		1.0		1.0

Table 11 compares GRADE POINT AVERAGES of the two groups and gives the measures of central tendency.[1] The differences between the groups are minor.

Table 11

Grade Point Average

Grade Point Average	Vocational		Nonvocational	
	#	%	#	%
00-.9	144	7	135	9
1.0-1.9	211	10	161	11
2.0-2.9	788	37	527	35
3.0-3.9	751	35	446	30
4.0	257	11	225	15
	2,151		1,494	
MEAN[1]	2.8		2.7	
MEDIAN[1]	2.9		2.9	
MODE[1]	3.0		4.0	

Each interviewed subject was asked "How much has your study at _____College helped you toward meeting your goals?" The results for this question are given in Table 12. A mean was computed from a Likert-type scale from 0 through 4. The data indicate that the vocational students judge themselves

[1]All measures of central tendency were computed from ungrouped data. Because these distributions are multimodal, the usefulness of mode as a measure of central tendency is reduced.

to have made slight, but significantly better, progress toward their goals than the nonvocational.

Those students who had earned no credit for the Fall 1979 semester/quarter were asked "Was getting credit a reason for your taking classes here?" The (startling?) results are given in Table 13. There were 46% of the vocational students and 52% of the nonvocational students who indicated that they did not enroll for credit.[1] Those who said credit was not a reason for taking classes were asked how well they had achieved the goals for which they came to college. The results (again, startling!) for this question are given in Table 14. For both groups, almost two-thirds of the students said they accomplished their goals Acceptably, Very Well, or Excellently.

Table 12

Study Help Toward Goals

	Vocational		Nonvocational	
	#	%	#	%
0 Not at all	80	5	89	6
1 Poorly	114	7	131	9
2 Acceptably	480	28	434	31
3 Very much	795	46	595	42
4 Excellently	269	15	171	12
	1,738		1,420	
MEAN	2.61		2.44	

[1] Few California Community Colleges permit students to audit classes because the state financing formulae penalize the college for "No Credit" courses and students. Consequently, a person desiring to learn a skill, but not interested in credit, must masquerade as a regular student.

Table 13

Credit a Reason For Attending?

	Vocational		Nonvocational	
	#	%	#	%
Yes	146	54	164	48
No	126	46	174	52
	272		343	

Table 14

Zero Credit and Goal Attainment

		Vocational		Nonvocational	
		#	%	#	%
0	Not at all	18	15	24	16
1	Poorly	23	20	16	10
2	Acceptably	27	24	48	31
3	Very well	35	30	53	34
4	Excellently	12	10	13	8
		115		154	
	MEAN	2.05		2.1	

For many years community college faculty and administrators have asserted that, though students do not complete their courses, neither the student nor the college has failed. The results presented in Tables 13 and 14 provide empirical evidence to support this claim. There are many reasons why community college students enroll in courses that have little or nothing to do with earning college credit. Interviewing those students who earned no credit and hearing their "success stories" was a most fulfilling experience.

Table 15 gives the number and proportion of the most frequently used reasons for a student not enrolling in the Spring 1979 semester/quarter. Some of the reasons show a sharp distinction between vocational and nonvocational.

1. Met objectives - 14% of the vocational students were not enrolled because they had met their objectives, while only 6% of the nonvocational had (probably self-enrichment students).

2. Conflict with other school - only 2% of the vocational students, but 6% of the nonvocational, claimed this to be their major reason for not returning.

3. Job conflict - while 20% of the vocational students used this reason, 27% of the nonvocational claimed to have conflict between their school and job.

Table 15

Reasons For Not Enrolling In Spring

Why Not Enrolled	Vocational		Nonvocational	
	#	%	#	%
Transportation	7	3	9	3
Transfer other college	17	7	23	8
Moved	11	5	15	5
Met objectives	33	14	17	6
Graduated	2	1	1	0
Conflict other school	6	2	17	6
Financial problems	6	2	6	2
Job conflict	49	20	79	27
Job pref. over school	29	12	20	7
Illness	9	4	22	8
Dislike class content	7	3	15	5
Disliked instruction	3	1	5	2
Underprepared	23	9	19	7
Assignments too heavy	1	0	3	1
Indefinite motive	20	8	35	12
Lack of child care	7	3	3	1

4. Job preference over school - the vocational students used this reason more than the non-vocational students by a 12% to 7% ratio.

5. Indefinite motivation (described fully in Part 1) - the responses of 8% of the vocational students and 12% of the nonvocational students were placed in this category.

Summarizing the reasons given for nonattendance at the community college in the spring, the vocational students tend to complete their objectives for attending a college more than the nonvocational students, had fewer conflicts with other schools, did not find their job at odds with their attendance as much, valued their jobs over school attendance more, and seemed to have a clearer definition of why they were attending college.

Each student who had dropped a course was asked to give up to three reasons for the drop. Table 16 gives the results of that question (the percentages add to greater than 100% because of the multiple reasons given). Surprisingly, none of the reasons seem to discriminate between the vocational and nonvocational students. Whereas the reasons for nonattendance were, in many instances, different, reasons for dropping classes for the two groups were used with about equal frequency.

The last items of the interview in Spring 1979 asked the student to rate selected college services on a scale of

Table 16

Reasons For Dropping Classes

	Vocational		Nonvocational	
	#	%[1]	#	%[1]
Transportation	28	4	11	2
Accepted at another college	6	1	2	0
Moved	7	1	5	1
Classes closed	8	1	11	2
Classes cnld-disc	23	4	5	1
Class of int n-ofrd	3	0	2	0
Financial problems	12	2	10	2
Job conflict	137	21	89	19
Job pref. over school	34	5	15	3
Illness	44	7	39	8
Disliked class	83	13	46	10
Disliked instructor	45	7	42	9
Disliked instruction	41	6	37	8
Underprepared	130	20	102	22
Assnmnts too heavy	62	10	58	12
Class switching	32	5	32	7
Indefinite motivate	68	11	40	9
Lack child care	5	1	4	1
LES/NES	0	0	4	1
Displaced homemaker	2	0	1	0
Physical handicap	1	0	5	1
Bureaucratic Tangle	0	0	3	1
Out of dist. residence	0	0	1	0

1. Total is greater than 100% because multiple responses were permitted.

1 to 5. The services rated were: Classroom Instruction, Help Outside Class, Program Planning Assistance, Vocational Information Available and General Opinion of College. Table 17A gives the MEAN ($\bar{X}$), the standard deviation (S), and the number of students who rated each service (N). There are only slight differences between the vocational and nonvocational student, and none are statistically significant. It is apparent that the General Opinion of the College and Classroom Instruction were evaluated higher by both groups than the other services listed.

Table 17B shows the Spring enrollment group of the vocational and nonvocational students. There were 11% more vocational students enrolled in the spring than nonvocational (78% to 67%). This verifies previous findings (Sheldon and Hunter, 1978) that vocational students were more persistent and productive than the nonvocational.

Table 17C shows the time of day that the two groups enrolled in classes for the spring semester/quarter. As expected, a greater percentage of nonvocational than vocational students attend day classes.

Table 17A

Evaluation of College Services

	Vocational			Nonvocational		
	X	S	N	X	S	N
Classroom Instruction	4.06	.80	1,762	4.00	.84	1,425
Help outside class	3.66	1.18	1,240	3.68	1.23	1,028
Program Planning Assistance	3.67	1.12	1,264	3.59	1.22	987
Vocational Information Available	3.89	1.10	1,263	3.79	1.13	944
General Opinion of College	4.30	.75	1,756	4.26	.76	1,426

Table 17B

Spring Enrollment Group

	Vocational		Nonvocational	
	#	%	#	%
Not Registering	540	21	624	32
Reg.-No Class	40	2	41	2
Reg.-With Class	2,024	78	1,335	67
TOTAL	2,611		2,000	

Table 17C

Spring Class Hours

	Vocational		Nonvocational	
	#	%	#	%
Before 4:30	1,066	52	780	59
After 4:30	509	25	280	21
Both	460	23	268	20
TOTAL	2,038		1,328	

WORK VARIABLES

This section describes four variables related to the work experience of the sample students. These are: JOB STATUS, NUMBER OF HOURS WORKING, HOURLY WAGE, and CLASSES JOB RELATED?

Table 18 lists the job status as described by the sample students in both Fall 1978 and Spring 1979. Few differences between vocational and nonvocational students appear in the table. The most significant, and perhaps expected, is that there are 4 to 5% points more skilled workers among the vocational than nonvocational students, and 3% more homemakers in the nonvocational.

Table 19 shows the frequency distribution of the number of hours worked per week by both groups and the measures of central tendency. The vocational group averages about two hours more than the nonvocational group, and has a larger proportion of students working 40 hours or more. However, discrepancies between the two groups are not dramatic. Considering the emphasis by vocational students on employment, one might expect greater differences in the hours of employment.

Table 20 gives the hourly wage for both groups in Fall 1978 and Spring 1979, and the measures of central tendency for both periods. Though the vocational students had a slightly higher wage in the spring, the difference is not significant, and proportions of each group in each interval are remarkably similar.

Table 18

Job Status

	Vocational				Nonvocational			
	Fall 1978		Spring 1979		Fall 1978		Spring 1979	
	#	%	#	%	#	%	#	%
Unskilled	390	16	234	15	349	19	200	16
Semi-skilled	731	30	581	37	520	28	446	35
Skilled	452	19	343	22	271	14	232	18
Prof-Super.	108	5	86	6	111	6	96	8
Student-Unemployed	508	21	170	11	388	21	115	9
Other	76	3	25	2	82	4	44	4
Homemaker	140	6	88	6	170	9	109	9
Commercial			37	2			20	2

Table 19

Hours Worked

	Vocational		Nonvocational	
	#	%	#	%
1-5	18	1	18	2
6-10	59	4	62	5
11-15	95	6	85	7
16-20	260	16	177	14
21-25	164	10	133	11
26-30	144	9	101	8
31-35	67	4	50	4
36-40	729	44	540	44
41-45	47	3	28	2
46-50	55	3	36	3
51+	15	1	8	1
TOTAL	1,653		1,238	
MEAN	30.0		29.3	
MEDIAN	35.6		34.8	
MODE	40.0		40.0	

Table 20

Hourly Wage

	Vocational				Nonvocational			
	Fall '78		Spring '79		Fall '78		Spring '79	
	#	%	#	%	#	%	#	%
$2.00 - $2.99	11	1	9	1	7	1	4	0
$3.00 - $3.99	602	42	373	32	488	44	312	34
$4.00 - $4.99	326	23	263	23	231	21	240	26
$5.00 - $5.99	154	11	173	15	130	12	114	13
$6.00 - $6.99	103	7	88	8	73	7	77	8
$7.00 - $7.99	72	5	65	6	47	4	37	4
$8.00 - $8.99	65	5	79	7	37	3	33	4
$9.00 - $9.99	30	2	28	2	28	3	28	3
$10.00 - $10.99	30	2	27	2	22	2	17	2
$11.00 - $11.49	14	1	14	1	6	0	8	1
$11.50 - $14.49	20	1	20	2	18	2	22	2
$14.50 - $17.49	11	1	13	1	14	1	13	1
$17.50 - $40.00	11	1	7	1	11	1	8	1
	1,451		1,159		1,112		913	
MEAN	4.78		5.14		4.79		5.06	
MEDIAN	3.85		4.25		3.76		4.09	
MODE	3.00		3.00		3.00		3.00	

Each working student was asked "Are the classes you are taking related to your job?" The responses to this question are summarized in Table 21. As expected, vocational students have a much higher proportion "Strongly Related" than the nonvocational (27% to 13%) and significantly fewer in the categories "Not at all related" (53% to 69%).

Table 21

Classes Job Related?

	Vocational		Nonvocational	
	#	%	#	%
Not at all	685	53	706	69
Slightly	108	8	92	9
Moderately	162	12	88	9
Strongly	347	27	137	13
	1,302		1,023	

SUMMARY OF CONTRAST

Few demographic differences were found between vocational and nonvocational students. There was a slightly higher percentage of women among nonvocational students than among vocational students, probably because there are more vocational courses offered which are traditionally associated with men.

Vocational students signed up for, attempted, and passed slightly more units than nonvocational students. These findings confirm a trend observed during the pilot project for this study (Sheldon and Hunter, 1978). Sheldon and Hunter found that vocational students were more productive than nonvocational students, measured by the ratio of classes passed to classes enrolled in. Little difference was observed in Grade Point Average between the two groups.

Differences were also found between the two groups with respect to their reasons for nonattendance in Spring 1979. Vocational students tended to complete their objectives for attending college more than nonvocational students, had fewer conflicts with other schools, did not find their jobs at odds with their attendance as much, valued their jobs over school attendance more, and seemed to have a better understanding of their goals in college.

There was a slightly higher percentage of skilled workers among the vocational than the nonvocational, and a smaller percentage of homemakers among the former than the latter. Differences in hours of employment and hourly wage were slight.

Vocational students were higher in each category. Not surprisingly, a higher percentage of vocational students reported that their courses were moderately or strongly related to their job.

COMPARISON OF DAY AND EVENING STUDENTS

Conventional wisdom, drawn from the observations of community college instructors, states that day students and evening students are different. The latter are described as older, more mature, more interested in their studies. This section of the report tests these assertions and examines the ways in which the two groups differ on demographic, employment, and academic dimensions.

Table 22 below shows the proportion of sample students attending during daytime and evening hours. "Evening" classes were defined as those which began at 4:30 or later. The data indicate that most of the 14% of students who attended both day and evening were day students who had one class beginning after 4:30 p.m. For purposes of comparison, these students were considered day students. In the following tables, 4,668 students (62%) are considered day students, and 2,835 students (38%) are considered evening students.

Table 22
Day and Evening Students

	#	%
Day only	3,627	48
Evening only	2,835	38
Both	1,039	14

Unlike the comparison between vocational and nonvocational students, it is not necessary to determine the criteria on which the two groups are to be separated. The purpose of this section is to determine what differences exist between the two groups.

The variables chosen were, SEX, AGE, MARITAL STATUS, DEPENDENTS, OCCUPATIONAL STATUS, HOURS OF EMPLOYMENT, WAGE, LAST SCHOOL ATTENDED, HIGHEST GRADE, COLLEGE OBJECTIVES, JOB FOR WHICH IN TRAINING, EXPECTED LENGTH AT COLLEGE, FALL 1978 ENROLLMENT GROUP, UNITS SIGNED UP FOR, UNITS ATTEMPTED, UNITS PASSED, COURSES SIGNED UP FOR, COURSES PASSED, GRADE POINT AVERAGE, AND VOCATIONAL/NONVOCATIONAL based on the SAM major. These will be examined under the headings Demographic Variables, Work Variables, and Academic Variables. In addition, comparisons were made between student ratings of their college career and their college.

DEMOGRAPHIC VARIABLES

Demographic variables include SEX, AGE, MARITAL STATUS, and DEPENDENTS.

SEX

Table 23 shows the breakdown of Day/Evening by sex. Only minor differences exist in sex ratio.

Table 23
Day/Evening Students by Sex

	Day		Evening	
	#	%	#	%
Male	2,095	45	1,243	44
Female	2,567	55	1,586	56

AGE

Table 24 shows a frequency distribution of the two groups on age and the measures of central tendency. These data confirm assertions that evening students are older than day students. All measures of central tendency are significantly higher for evening students than for day students. Further, the proportion of those more than 45 years of age is also higher.

Table 24
Day/Evening Students by Age

Age	Day #	Day %	Evening #	Evening %
15-19	2,739	61	447	17
20-24	783	17	597	23
25-29	361	8	475	18
30-34	236	5	353	13
35-39	132	3	248	9
40-44	90	2	171	7
45-Highest	171	4	383	13
MEAN	23		30	
MEDIAN	19		27	
MODE	18		22	

MARITAL STATUS

Table 25 shows the marital status of day and evening students. A higher percentage of evening students are married than day students. The numbers are small, but a larger percentage of evening students are divorced.

Table 25
Day/Evening Students by Marital Status

	Day		Evening	
	#	%	#	%
Single	3,051	77	879	38
Married	725	18	1,170	51
Separated	38	1	49	2
Divorced	130	3	180	8
Widowed	15	-0-	29	1

Table 26 shows the number of dependents of day and evening students. More than twice the percentage of evening students than day students support one person, and almost three times the percentage of evening students support two people, probably a wife and one child. This is difficult to infer with certainty, however, because a large number of working wives are not dependents.

These data, coupled with the information on AGE (Table 24) and MARITAL STATUS (Table 25), show that evening students tend to be older, more mature, and have more home responsibilities. It is likely also that they have more experience with the world of work.

Table 26
Day/Evening Students by Dependents

	Day		Evening	
	#	%	#	%
0	3,363	86	1,146	65
1	234	5	269	12
2	174	4	236	11
3	94	2	158	7
4	34	1	76	3
5+	25	1	75	3
MEAN	.3		.8	
MEDIAN	.1		.3	
MODE	0		0	

ETHNICITY

Table 27 below shows the breakdown of day and evening students by ethnicity. There are no differences between day and evening students with respect to ethnicity. (An examination of the native languages of Asian and Hispanic minority members, not shown, showed no difference either).

Table 27
Day/Evening Students by Ethnicity

	Day		Evening	
	#	%	#	%
Am. Ind/Al. Nat.	36	1	18	1
Asian/Pac. Is.	281	7	136	6
Black	415	10	169	7
Hispanic	546	13	280	12
White	2,706	66	1,664	71
Other	101	3	71	3

WORK VARIABLES

Table 28 shows the breakdown of the sample by occupational status. For this variable, respondents were asked for their customary status; there is, therefore, no category of "Unemployed" except for those students who are being supported by family or others.[1]

Table 28
Occupational Status

	Day		Evening	
	#	%	#	%
Student, Usually Unemployed	1,018	27	109	5
Homemaker	270	7	188	9
Unskilled	775	20	182	8
Semi-Skilled	1,037	27	651	30
Skilled	445	12	671	31
Prof./Sup.	94	2	288	13
Other	166	4	102	4

The data show that day and evening students differ sharply on this dimension. Among day students, there is a higher percentage of those who are Students Not Usually Employed and Unskilled Workers than among evening students. Among evening students, there is a higher percentage of Skilled Workers and of Professional/Supervisory workers. The percentage of Homemakers and Semi-Skilled workers is the

[1]See footnote page 3.

same for both groups.

The data in Table 29 indicate that evening students work longer hours than day students. Seventy-four percent of evening students work 35-40 hours a week, and an examination of ungrouped data shows that 1,264 out of the 1,293 students of Table 29 reported working 40 hours a week. In contrast, only 29% of day students worked these hours. Sixty-six percent of them worked 35 hours a week or less. A plurality of these worked between 16 and 20 hours a week.

More than twice the proportion of day than evening students from the total sample listed themselves as unemployed. These data appear in the bottom line of the frequency distribution.

Table 29

Working Students' Hours of Employment

	Day		Evening	
	#	%	#	%
1-15	375	16	62	4
16-35	1,177	51	232	13
36-40	666	29	1,293	74
41+	91	4	171	10
Unemployed	1,408	(30)	398	(14)
MEAN	27.6		37.8	
MEDIAN	25.5		39.9	
MODE	40.0		40.0	

The data in Table 30 show that evening students earn more than day students. Fifty percent of day students earn between $2.50 and $3.49 per hour, compared with 16% of evening students. Twice the percentage of evening students earn between $3.50 and $5.50 an hour than day students. Both the mean and median are $2.00 higher for evening than day students. The mode differs by $1.00, but this is misleading since the difference for evening students between the percentage making $3.50-4.49 and $4.50-5.49 is not extreme.

Table 30

Working Students' Hourly Wage

	Day		Evening	
	#	%	#	%
.50-2.49	17	1	7	1
2.50-3.49	1,154	54	230	16
3.50-4.49	475	22	301	21
4.50-5.49	187	9	237	17
5.50-6.49	92	4	170	12
6.50-7.49	66	3	115	8
7.50+	135	6	359	25
MEAN	4.14		6.10	
MEDIAN	3.41		5.22	
MODE	3.00		4.00	

The data in Table 31 indicate that evening students have had more educational experience than day students. Seventy-three percent of day students last attended high school, compared with 42% of evening students. Forty-eight percent of evening students had either attended a community college or a four-year college before entering their participating college.

Table 31

Last School Attended

	Day		Evening	
	#	%	#	%
High School	2,851	73	945	42
Adult Night School	77	2	74	3
Community College	508	13	587	26
Four-year College	345	9	481	22
ROP-ROC	10	0	7	0
Other	99	3	148	7

The data in Table 32 indicate that evening students are different from day students in their educational backgrounds. More than two-thirds day students have no more than high school diplomas, and only 7% have A.A. degrees or higher. Among evening students, almost 20% hold A.A. degrees or more, and 50% have had some college or trade school experience beyond high school.

Highest Grade Completed

	Day		Evening	
	#	%	#	%
Non-H.S. Graduate	284	7	196	7
H.S. Graduate	2,675	69	930	42
Some Coll./Trd. Sc.	673	17	682	31
A.A. Deg./Cert.	104	3	128	6
B.A./B.S.	111	3	227	10
Higher Degree	20	1	64	3

The data in Table 33 indicate that there are substantial differences between the overall goals of day and evening students. Almost half of the day students listed "Preparation for Transfer" as their main reason for coming, and only 19% listed Self-Enrichment. Evening students listed these goals in reverse order, 43% Self-Enrichment and 16% Preparation for Transfer. A higher percentage of day students than evening students listed Pre-Employment Training as a main reason for attendance.

Table 33

College Objectives

	Day		Evening	
	#	%	#	%
1 Pre-Emp. Trang.	974	33	403	22
2 Prep. Transfer	1,345	44	290	16
4 Inservice	100	3	286	16
8 Retraining	45	2	57	3
16 Self-Enrichment	555	19	767	43
TOTAL	2,999		1,803	

Tables 34A and 34B show the distributions of JOB FOR WHICH IN TRAINING and INTERVIEW MAJOR for day and evening students. Almost three times as many evening as day students listed Self-Enrichment as their purpose, and half the proportion of evening students than day students chose Transfer. The two groups are similar in that the largest percentage of those with specific majors chose Business and Management, followed by Engineering and Related Sciences, and Health. However, the percentage of day students choosing Business and Management for JOB FOR WHICH IN TRAINING was smaller than either evening students or both sets for INTERVIEW MAJOR.

These data indicate that evening students have different goals from day students. This may explain the higher incidence of noncompleted courses among evening students (see Tables 37 and 38). Students taking courses for self-enrichment rather than for credit are less likely to be interested in submitting required assignments and taking examinations than those who include credit in their goals. This hypothesis is substantiated by the finding that, of those who received no credit for courses in Fall 1978, significantly more evening students than day students said that credit was not a reason for taking courses (see Table 42).

Table 34A

Job for Which in Training

	Day		Eveng.	
	#	%	#	%
Business & Management	646	14	442	24
Engineering & Reltd. Sc.	284	9	198	11
Health	302	10	106	6
Transfer	364	12	102	6
Self-Enrich-ment	363	12	579	31
Other*	1,060	43	432	22

Table 34B

Interview Major

	Day		Eveng.	
	#	%	#	%
Business & Management	735	25	444	26
Engineering & Reltd. Sc.	309	10	198	12
Health	283	9	92	5
Transfer	194	6	53	3
Self-Enrich-ment	320	10	490	29
Other*	1,275	41	444	25

*Distributed over 24 Subject Areas.

Table 35 shows that day and evening students have different expected length-of-stay patterns. Forty-one percent of day students expected to stay 1-2 years, compared with only 17% for evening students. Forty-two percent of evening students said they did not know how long their stay would be, compared with 24% of day students. Almost 20% of evening students expected to attend on an "off-and-on" or Occasional basis compared with only 6% for day students.

Table 35

Expected Length-of-Stay at College

	Day		Evening	
	#	%	#	%
0-1 Yr.	688	19	336	17
1-2 Yrs.	1,477	41	346	17
2+ Yrs.	353	10	117	6
Don't Know	845	24	835	42
Occasionally	200	6	376	19
TOTAL	3,563		2,010	

Day and evening students show different expected length of stay patterns. Forty-one percent of day students expected to stay 1-2 years, compared with only 17% for evening students.

ACADEMIC VARIABLES

The variable FALL ENROLLMENT GROUP (Table 36) shows the extent to which respondents maintained classes in Fall, 1978. A higher percentage of evening than day students Maintained All classes, but more also Withdrew All courses. More day than evening students withdrew from some of their courses. The apparent contradictions may arise from enrollment patterns. More than 50% (see Table 38) of the evening students take only one class, and thus cannot Withdraw from "Some" classes. They may also be less likely to "shop" for classes than day students.

Table 36

Fall Enrollment Group by Day/Evening

	Day		Evening	
	#	%	#	%
Withdrew Some	1,717	46	384	19
Withdrew All	533	14	567	27
Maintained All	1,447	39	1,096	53

UNITS

The data in Table 37 show that evening students signed up for, attempted, and passed, fewer units than day students (see footnote on page 15). The distribution of UNITS SIGNED UP FOR appears symmetrical for day students, while that of the evening students has a positive skew. This pattern continues with UNITS ATTEMPTED. A higher percentage of evening than day students ended up with no A-F grades. This may be a result of the fact that many older students who are not seeking degrees or transfer credit are not interested in formal course completion. For example, of evening students who received no credit for their work, 60% said that credit was not a reason for taking the course. From this, and interview comments, it appears that large numbers of community college students attend for the purpose of learning and consider college credit irrelevant. This pattern is more evident with UNITS PASSED. Twenty-four percent of evening students, compared with 14% of day students, passed no units.

UNITS * Table 37

	Signed Up For [1]				Attempted [1]				Passed [1]			
	Day		Eve.		Day		Eve.		Day		Eve.	
	#	%	#	%	#	%	#	%	#	%	#	%
1-2	128	4	357	17	183	6	258	20	234	8	308	23
3-5	372	10	940	46	485	17	669	51	515	17	676	51
6-8	408	11	415	20	520	18	217	17	522	17	217	16
9-11	484	13	173	8	563	19	70	5	593	20	73	6
12-14	1,002	27	109	5	644	22	48	4	709	24	41	3
15-17	740	20	42	2	377	13	16	1	360	12	13	1
18-20	366	10	21	1	95	3	12	1	69	2	4	0
21+	201	5	5	0	62	2	12	1	11	0	1	0
Zero	8	(0)	14	(1)	455	(10)	502	(18)	638	(14)	672	(24)
MEAN	12.5		5.2		9.8		4.7		9.3		4.6	
MEDIAN	12.9		3.8		9.7		3.3		9.6		4.1	
MODE	13.0		3.0		12.0		3.0		12.0		4.0	

*Measures of central tendency computed using Zero as a missing value.

1 See Footnote Page 15

The data in Table 38 indicate that day students take more courses than night students. The distribution of COURSES SIGNED UP FOR for day students is approximately bilaterally symmetric, with mean, median, and mode clustered close to five courses. The distribution for evening students has a pronounced positive skew; the mode is one and the mean slightly less than two.

Table 38

Courses

	Courses Signed Up For*				Courses Passed*			
	# Day	%	# Eve.	%	# Day	%	# Eve.	%
0	6	0	4	0	612	17	660	33
1	341	9	1,084	52	558	15	903	45
2	390	11	547	26	443	12	285	14
3	391	11	203	10	518	14	81	4
4	606	16	116	6	556	15	48	2
5	699	19	74	4	522	14	19	1
6	553	15	20	1	243	7	4	0
7	353	10	12	0	115	3	3	0
8	202	5	8	0	47	1	2	0
9	88	2	4	0	20	1	1	0
10+	97	3	5	0	14	0	2	0
MEAN	4.7		1.9		3.0		1.0	
MEDIAN	4.6		1.5		2.9		.9	
MODE	5.0		1.0		0		1.0	

* Measures of central tendency calculated using ZERO as a value.

The day students' distribution for COURSES PASSED is almost flat, for evening students positvely skewed. One third of evening students passed no courses. This may be more a function of the different goals which day and evening students have rather than of relative persistence.

The data in Table 39 show G.P.A. differences between day and evening students, though they are difficult to interpret. The population of day and evening instructors is different, and G.P.A. is therefore based on varying criteria rather than on objective outcomes of instruction. Grading practices are also likely to vary across the 15 colleges in the consortium.

The distribution of GRADE POINT AVERAGE for day students is symmetrical, with a mean of C+ and a mode of B. That of evening students is asymmetrical, with a negative skew marred by a high incidence of G.P.A. less than 1.0. The mean is little different from day students, probably caused by the 12% who received a G.P.A. of less than 0.9.

The higher incidence of As and Bs among evening students might lead to the conclusion that evening classes attract better students than day classes. An alternate hypothesis is that evening instructors are relatively lenient in their grading practices.

Table 39

Grade Point Average

	Day		Eve.	
	#	%	#	%
0-.9	207	7	163	12
1.0-1.9	388	12	62	5
2.0-2.9	1,209	43	305	23
3.0-3.9	928	30	402	35
4.0	280	9	339	25
MEAN		2.5		2.8
MODE		3.0		3.0

The data in Table 40 indicate that the proportion of vocational and nonvocational students among day and evening students is about the same. Because evening students often attend part-time, this would indicate that vocational courses are of as much interest to part-timers as to full-time students.

Table 40

Vocational and Non-Vocational Students

	Day		Eve.	
	#	%	#	%
Vocational	1,395	44	593	42
Non-Vocational	1,758	56	843	59

STUDENT RATING SCALE DATA

During the interview, students were asked to rate their college experience on (1) the relationship between their courses and their jobs, (2) whether they were interested in obtaining credit, (3) the extent to which they had met their goals, (4) the extent to which their studies were a help in their movement

toward their goals, and (5) on whether or not one of the purposes of attendance was the maintenance of a license. Those who were not in attendance in the spring were asked whether they planned to take more courses at the college. Students who had made use of counseling services in the fall were asked to rate those services. All students were asked to state what they perceived to be their counseling needs in the spring. All students were also asked to rate their college on the quality of Classroom Instruction, on Instructor Help Outside Class, on Program Planning Assistance, available vocational information, and on the College as a Whole. The following tables show the results of these ratings.

Table 41 shows the extent to which courses taken by the student related to that student's current job. Day and evening students differ markedly with respect to this variable, especially at the ends of the Likert-type scale. A higher percentage of day than evening students work in jobs which do not relate at all to their courses. Almost twice the proportion of evening students than day students are engaged in course work that relates strongly to their jobs.

Table 41

Courses Job-Related

	# Day	%	# Eve.	%
Not at All	1,168	67	545	50
Slightly	136	8	103	10
Moderately	181	10	121	11
Strongly	263	15	312	29

To determine whether a student needed a passing grade, or whether the student's goals were limited to obtaining information or skills, students who received no credit for their fall course work were asked whether earning college credit was a reason for thier enrolling. The data in Table 42 indicate that evening students who received no credit are less college-credit-oriented than day students with no credit. Fifty-nine percent of day students indicated that credit was a reason for taking classes; 60% of evening students indicated that credit was not a reason. Evening students are more involved in studying independently than day students. Further, judging the efficacy of evening instruction by course grades will lead to erroneous conclusions because students who are not interested in credit are less likely to complete assignments or take exams.

Table 42

Credit a Reason?

	# Day	%	# Eve.	%
Yes	263	59	174	40
No	173	40	266	60

Students who responded that credit was not a reason for taking classes were asked to rate on a scale of 0-4 the extent to which they had met their goals. Table 43 shows that the differences between the groups are at the end of the scale. A higher precentage of day students than evening students indicated that they had Not At All attained their goals; twice the proportion of evening students indicated that they met their goals Excellently. Given the discrepancies in age between the two groups (see Table 24), these differences may be a function of maturity level.

Table 43

Goal Attainment

	# Day	%	# Eve.	%
Not at All	36	23	36	16
Poorly	22	14	34	15
Acceptably	36	23	63	27
Very Well	52	34	71	31
Excellently	8	5	26	11

All students in the sample were asked whether they felt that their study in community college had helped them toward their goals. As Table 44 shows, day and evening students did not differ in their responses to this question.

Table 44

Study Help?

	# Day	%	# Eve.	%
Not At All	168	6	117	9
Poorly	197	8	103	8
Acceptably	814	32	398	30
Very Much	1,029	41	533	40
Excellently	303	12	174	13

Vocational students were asked whether their purpose in taking courses was the maintenance of their professional licenses; e.g., nurses, teachers. Table 45 shows that three times the proportion of evening than day students said that they were taking courses for license reasons. Probably this is due to the fact that more people work days than nights.

Table 45

License Maintenance

	# Day	%	# Eve.	%
Yes	73	6	90	18
No	1,170	94	406	82

Students who had registered and taken classes in the fall, but were not in residence in the spring, were asked whether they planned to take more courses in their community college. The data in Table 46 show that almost two-thirds of both groups are likely to return.

Table 46

More Courses?

	# Day	%	# Eve.	%
Definitely	263	38	265	34
Probably	177	26	227	29
Undecided	132	19	145	19
Probably Not	58	8	85	11
Definitely Not	61	9	58	7

Students who had received counseling in the fall semester/ quarter were asked to rate the service which they had received. Table 47 shows that day and evening students did not differ in their ratings.

Table 47

Counseling

	# Day	%	# Eve.	%
Not Useful	24	6	9	8
Poor	32	7	11	10
Acceptable	129	30	30	28
Good	240	57	57	53

Students who were enrolled in the spring were asked to outline their counseling needs for spring. Multiple responses were permitted. The data in Table 48 show the responses of day and evening students who felt that they required counseling. Twice the proportion of day students over evening students indicated a need for more than one kind of counseling, which is perhaps a function of their relative age and maturity level. A greater proportion of evening students than day students wanted only Career and Academic Counseling and, though the proportions are small, a higher proportion of evening students than day students wanted Personal Counseling.

Table 48

Counseling Need

	# Day	%	# Eve.	%
Transfer	105	17	18	12
Career	119	19	47	31
Personal	22	13	13	8
Tutoring	21	3	5	3
Financial Aid	18	3	1	0
Veteran	3	1	2	1
Academic	148	24	45	30
Mixed	194	30	70	14
None	1,354	(29)	490	(17)

COLLEGE SERVICE RATING SCALES

Students in the sample were asked to rate the college they were attending on five dimensions, (1) Classroom Instruction, (2) Help Outside Class, (3) Program Planning Assistance, (4) Vocational Information Available, and (5) the College (an overall rating). Five-point Likert-type scales (0-4) were used.

The distributions of these scales are shown in Tables 49 to 53. Overall, both sets of students gave high ratings on all five scales. The distributions are negatively skewed, and all but one of the modes are three (Good). No important differences were found between day and evening students.

Table 49

Classroom Instruction

	# Day	%	# Eve.	%
No Experience	6	0	8	1
Poor (0)	11	1	8	2
Below Average (1)	58	2	20	4
Average (2)	482	20	43	19
Good (3)	1,177	50	234	38
Excellent (4)	636	27	473	37

Table 50

Help Outside Class

	# Day	%	# Eve	%
No Experience	108	5	114	14
Poor (0)	120	6	88	11
Below Average (1)	132	7	48	6
Average (2)	451	24	166	21
Good (3)	557	29	199	25
Excellent (4)	552	29	183	23

Table 51

Program Planning Assistance

	# Day	%	# Eve.	%
No Experience	136	7	114	18
Poor (0)	119	6	59	7
Below Average (1)	174	9	49	6
Average (2)	482	24	173	22
Good (3)	578	29	203	25
Excellent (4)	483	25	168	21

Table 52

Vocational Information Available

	# Day	%	# Eve.	%
No Experience	134	7	149	19
Poor (0)	90	5	47	6
Below Average (1)	98	5	37	5
Average (2)	366	19	158	18
Good (3)	625	33	218	26
Excellent (4)	582	31	229	28

Table 53

Rating of College

	# Day	%	# Eve.	%
No Experience	8	0	16	1
Poor (0)	13	1	6	1
Below Average (1)	39	2	22	2
Average (2)	298	12	131	11
Good (3)	1,016	43	508	41
Excellent (4)	1,004	42	549	45

DISCUSSION OF COMPARISON

Day and evening students constitute two different populations. The only demographic variables on which they do not differ are sex ratio and ethnicity. Most of the differences arise from age differences; the mean and median ages of evening students are seven and eight years higher than those of day students. A higher percentage of evening students are married and have dependents. As contrasted with day students, evening students tend to have higher skill level jobs, make more money, and more are employed. More evening than day students had attended school beyond high school or held degrees above a high school diploma.

Preparation for Transfer and Pre-employment Training accounted for more than three quarters of the goals of day students. Evening students tended to prefer goals associated with greater maturity and age; i.e., Inservice Training, Retraining, and Self-Enrichment. Evening students tended to be more stable in their enrollment practices, usually maintaining their classes to the end of the semester. Evening students, however, attempted fewer courses than day students, and passed fewer units. This is probably because older students are less interested in grades and college credit (see footnote 1 on page 20). Informal questioning during the interviews indicates that many older students take courses to get promotions or raises, and experience satisfaction when these expectations are met as the result of their college work. In general, evening students tended to take courses related to their work or

courses associated with personal interest than day students.

More evening than day students indicated they had no experience with INSTRUCTOR HELP OUTSIDE CLASS, PROGRAM PLANNING ASSISTANCE, or VOCATIONAL INFORMATION AVAILABLE. It is not possible to determine whether this results from the age differences of the two groups, or from the fact that these services are less available in the evening.

In general, differences between the two groups reflect the fact that evening students are an older, probably more mature, and more work-experienced group than day students.

SUMMARY AND DISCUSSION

This section summarizes the data from the Statewide Longitudinal Study, Academic Year 1978-1979 Part 1 and the present document, Part 2. Much of the data referred to will be found in Part 1 (Hunter and Sheldon, 1979).

There are five topics in this section.

1. The feasibility of using sampling for statewide reporting.
2. Special student groups.
3. Contrasting vocational and nonvocational students.
4. Contrasting day and evening students.
5. The nature of community college students: incipient prototypes.

FEASIBILITY OF USING SAMPLING FOR STATEWIDE REPORTING

The fifteen colleges for this study were chosen to be a sample representative of the 106 community colleges in the state in terms of geography, the urban/rural dimension, size of college, and ethnic representation. Within each of the 15 colleges, a random sample was selected from those who applied for admission for the first time in Fall 1978.

A comparison was made on age, sex, and ethnicity between the sample and a total community college student data base of more than one million students. The results of the comparison

indicated that the sample was slightly younger and had slightly fewer males than the total population. Ethnic percentages were the same as in the population. The slight discrepancies in age and sex ratio can be accounted for by the fact that the sample consisted of only first-time students, while the population included all community college students in the state.

Considering these data (reported in Part I) the answer to the question of the usefulness of samples in statewide reporting is a qualified "yes." There are two qualifications.

The first qualification is the limitation in the sample of certain student groups. The Limited-English-Speaking and Non-English-Speaking students were not represented in the interview data in proportion to their numbers in the sample. Though each student was interviewed, it was difficult for colleges to find interviewer/interpreters for specific languages, most notably Vietnamese, Korean, and other Asian tongues. There was little difficulty in interviewing Spanish-speaking students, but recent arrivals have swelled the ranks of the Asian students more than was expected when the study was designed.

The second qualification deals with the requirements for statewide reporting. If the federal reporting requirements include only data that can be obtained from student records, there is no need to sample or to interview. However, the most relevant, substantive, and useful information comes from student interviews. Further, interview data show that some of the information in the student records is inaccurate or incomplete. For example, a large proportion of community college students decline to state their ethnic backgrounds on admission or regis-

tration forms. Few consider these data confidential when being interviewed.

Notwithstanding these limitations, it seems appropriate to use sample data such as those collected for the Statewide Longitudinal Study for reporting on all California Community Colleges.

SPECIAL STUDENT GROUPS

Special effort was expended to collect accurate data on those students who fall into the following categories:

a. Educationally Disadvantaged[1]
b. Financially Disadvantaged[1]
c. Physically Handicapped
d. Ethnic Minorities
e. Displaced Homemaker
f. Nontraditional Major
g. Students with Limited English Speaking Ability (LESA)

The major findings with respect to these groups were two. First, less than 2% of the population of California Community College students fall into the categories Displaced Homemaker, Nontraditional Major and LESA. Of these, a very small proportion report difficulties with their studies.

[1] These students were identified by asking them "Do you think you will need any special help with math or reading?" and "Will money be a problem to you while attending college?" Students who responded "Yes" to either were categorized as Disadvantaged.

Second, about 15% of the sample fall into the Educationally and Financially Disadvantaged category. Of these, about one-third were unaware of the help offered on their campuses; e.g., tutorial centers or Financial Aids Offices. By the spring of 1979, most of their problems had been solved.

Using clinical methods, information on the Special Student Groups was placed in categories and listed in Part 1 of this report. Because these data were not amenable to computer analysis, it was not possible during Academic Year 1978-1979 to provide frequency counts of the problems. One of the goals of the Academic year 1979-1980 will be to collect these data in such forms so as to produce frequency distributions. The results will be available when Fall 1979 data are analyzed.

The fact that only a small number of these special students were identified can be interpreted in a number of ways. On some campuses, handicap information is included in these records, and on these campuses interviewers were careful to allow handicapped persons to identify themselves. It is possible that not all did so. On those without this recorded information, some asked directly about handicap; others were somewhat indirect. Again, it is possible that not all handicapped persons identified themselves. Indeed, this apparently happened on a number of campuses where student record data showed a handicap, but the student replied "No" to the question.

Community colleges may have not been attracting appropriate numbers of the special students.

At present, the amount of effort being expended on these students seems disproportionate to the numbers enrolled.

At some point, this could become an example of reductio ad absurdum.

CONTRASTING VOCATIONAL AND NONVOCATIONAL STUDENTS

Students classified as vocational are slightly older, enroll in and pass more units, and are more likely to be evening students than those classified as nonvocational. Differences were significant, but not dramatic. Demographically, there was no difference between the two groups; i.e., they were about the same in ethnic background, marital status, and number of dependents.

As expected, vocational students took more courses related to their jobs or careers than did the nonvocational students. They tended to work more hours for a slightly higher salary than their nonvocational counterparts, and rated the college and its services slightly higher.

CONTRASTING DAY AND EVENING STUDENTS

Day and evening students come from different populations. Most of these differences are a function of the age and experience of the two groups. The mean and median age of evening students is higher by 7 and 8 years respectively than day students, and the upper tails of the distributions show that there is a smaller percentage of older students among the day than the evening group. The demographic variables MARITAL STATUS and NUMBER OF DEPENDENTS show that evening students have more responsibilities. Work variables indicate that evening students have more work experience and higher

salaries than day students. Academically, the evening group is characterized by higher attainment in terms of degrees earned than day students. In summary, evening students are older, have more responsibilities, and have a greater range of work and academic experience than day students.

Evening students tend to take fewer courses than day students, but appear to be more stable with respect to maintaining CLASSES SIGNED UP FOR. However, they are less "productive" than day students with respect to course completion. There is clinical evidence, however, that indicates that this is more of a function of difference in goals than in motivation. Fewer evening than day students indicated that college credit was an important reason for college attendance, and many of them said that they had received promotions and raises as a result of skills learned with no college credit earned. Their goals appear to be more work than transcript-oriented. Their measure of success at college is the effect of college work on their jobs, rather than grades received. Therefore, they show no compunction about avoiding final examinations, and failing to receive grade points for their work.

THE NATURE OF COMMUNITY COLLEGE STUDENTS: INCIPIENT PROTOTYPES

A task frequently assigned to a community college institutional researcher is to develop a "student profile." The underlying assumption is that the student body is homogeneous --describing one or two "typical" students will be enough to provide an understanding of all students enrolled in the colleges. This assumption is unwarranted. If, for instance,

using SLS data, one were to use the measures of central tendency to describe community college students, one would say, "The typical student is 27 years old, probably female, Caucasian, enrolled in more than three courses totaling more than 10 units, and is vocationally oriented." This profile would describe very few of those attending California community colleges. The modal AGE of community college students is nineteen; the modal number of COURSES ENROLLED IN and PASSED is one; more than a third of students come from minority ethnic groups, and about one-half claim their college work will either prepare them for transfer to a four-year college or supply self-enrichment.

Community college students are heterogeneous in every respect; demographic, vocational, and educational. To determine the nature of these students and thus define the educational service that community colleges provide, it is necessary to develop something other than the usual "student profile." One of the goals of this study is to develop several student prototypes. An understanding of these profiles will enable community college administrators to better understand what students are like, what they want, what enrollment patterns to expect, what subject matter to offer, the nature of student aspirations, and how to measure instructional success. It is toward this outcome that the incipient prototypes listed below have been generated.

Note that, with but one year of data available for scrutiny, the student prototypes are offered only tentatively.

They are presented here to familiarize the reader with the kinds of student categories that the data from the first year of the study indicate that community colleges are serving. Each prototype is first described in general terms, and then, when appropriate, in terms of the data thus far collected. The project staff welcomes any additions, corrections, deletions, or comments from consortium members or other California community college personnel about these speculations.

PROTOTYPE A: THE SCHOLAR

There is a small proportion of new students for whom the community college is the first postsecondary experience, and who are eligible to attend a four-year college directly from high school. A second group misses this eligibility by a small margin. Some members of both these groups take all, or most, of their lower division work at a community college and then transfer to a four-year college as a junior after two or three years. Some attend the community college because it is closer to home, some because it is less expensive.

The scholars are between 17 and 19, graduated from high school with a reasonable G.P.A., i.e., C+ or better. They are enrolled in four or more courses totaling 12 or more units, and complete at least nine units each semester/quarter with a G.P.A. of 2.5 or better. Their stated purpose for attending a community college is to transfer. Most of the courses in which these students enroll are in the general education area, but some may be considered vocational; e.g., business or computer science.

PROTOTYPE B: THE EXPEDITER

A small proportion of those attending community colleges are regular students at four-year colleges. They take courses that give four-year-college credits at community colleges because it better fits their school/work/family schedules. The courses are not in their major fields--most often they meet general education requirements.

The Expediters are 18 to 24 years old, but a few may be older. They are usually enrolled in one course, seldom for more than one regular semester/quarter. The Expediters are most numerous during summer sessions.

PROTOTYPE C: THE "WOULD-BE" SCHOLAR

A sizable proportion of the younger students did poorly in high school, earning a G.P.A. of about 2.0. Generally, this group is educationally undisciplined, has difficulty with basic skills, and has an unrealistic self-concept concerning academic potential. They drop classes for the reason defined in Part 1 of this report as "Indefinite Motivation." They attend community colleges out of habit; they've always gone to school, and they continue, waiting for something to happen. This is what Arthur Cohen of U.C.L.A. calls the "parking lot phenomenon."

In their first semester, the "Would-Be" Scholars are between 17 and 19. Typically, they enroll in six to eight courses but withdraw or are excluded from most, fail one, and earn a "C" in physical education. In the second semester, the pattern is repeated. Their reasons for dropping classes include "Job Conflict," though the jobs they hold are unskilled

and their stated reason for attending the community college is to transfer and earn a B.A. degree.

PROTOTYPE D: THE "TRY-HARD" SCHOLAR

A relatively large proportion of young students enter college with marginally acceptable educational skills. They come from middle class families and are expected to earn a college degree (B.A., B.S.). They are reasonably well motivated.

The "Try-hard" Scholars are 17 to 19 years old and recently graduated from high school, where they earned a C+ average. They enroll in five or six courses, 13 to 18 units, and finish 9 to 12 units with a 2.5 G.P.A. They work fifteen to twenty hours a week at a semi-skilled job and persist through four to six semesters. They transfer to a four-year college and successfully complete a B.A., usually in a technical field.

PROTOTYPE E: THE "AWAKENING" SCHOLAR

A small, but significant number of our students return to formal education after some number of years and discover they are academically talented.

The Awakening Scholars (often called the "Late Bloomers") are typically female, in their middle thirties or early forties. They were adequate high school students, but have little or no postsecondary education. From high school they worked and/or married, and frequently had families. They start with one or two courses at the community college taken for "self-enrichment" and find they earn As and Bs. Many continue through for an A.A. degree, transfer to a state college, and earn a B.A.

PROTOTYPE F: THE JOURNEYMAN

Some of our students enter with a clear vocational goal,

committed to learning the skills required for a specific job or profession.

The Journeyman is not typically of a particular age group. Many are in their early twenties, having spent the first few post high school years at an unskilled job. Realizing the futility of vocational success without special skills, they enroll in three or four courses, all directly related to the job or career in which they are interested. They seldom drop more than one course and maintain a respectable G.P.A. They work part-time in a field that is moderately or strongly related to their study. This pattern is continued for four to six semesters and results in an A.A. or A.S. degree.

PROTOTYPE G: THE JOB SEEKER

Some of our students enroll in vocational courses with no thought of completing a program or even a course. Rather, they want to learn specific skills and get work in that field as quickly as possible.

The Job Seekers enroll in one or two courses in a skill vocational field. They work diligently in developing job skills, but may not submit required assignments, papers, or exams. Getting college credit is not a prime motive for taking the course(s). "Ws" are acceptable grades for the Job Seekers. They may be of any age, but are most frequently in their middle twenties. They may attend courses for several semesters--but never earn a single unit of college credit.

PROTOTYPE H: THE JOB UP-GRADER

Some community college students are employed on the career ladder of their choice, and need specific skills for promotions

raises, or they seek a better job within the same career.

The Job Up-Graders are similar in motives and enrollment patterns to the Job Seekers. However, they tend to be slightly older and more included to earn college credits.

PROTOTYPES I AND J: THE MOONLIGHTER, THE CAREER CHANGER

These two prototypes are identical in their enrollment patterns. They are both employed in relatively high status jobs, but want to learn skills that are required for careers different from those in which they work. They differ from each other only in motives; the Moonlighter wants additional income and might try, for example, for a realtor's license; the Career Changer is bored, stymied, and wants to try his luck in a new field.

Both of these prototypes are usually in their late twenties to middle thirties. They are employed full-time and earn more than $5.00 per hour. They sign up for one or two vocational courses and tend to finish them. Whether or not they earn college credit depends on whether the field they wish to enter requires the formality of a certificate or a degree.

PROTOTYPE K: THE HOBBYIST

Many students are taking skills courses to enrich their personal lives. The Hobbyists come from all strata in the population. There are no demographic variables to describe them. They enroll in one course at a time, work to develop skills, but seldom take college credit. The courses they enroll in are frequently vocational; e.g., photography, engine tune-up, floraculture.

PROTOTYPE L: THE COURSE TAKER

A significant number of Californians feel uncomfortable unless they are "taking a course." They may already have earned advanced degrees, become wealthy, raised children and grandchildren. Still, they must take a course in something.

The Course Takers are perennials on the community college campuses. They enroll primarily in general education; e.g., Anthropology, Psychology, History, Spanish. They are not learning job or hobby skills--they are learning. They finish their courses, primarily to please teacher. They get good grades. They rate the community college very high. Next semester, they'll take another course.

PROTOTYPE M: THE CULTURE BUFF

Many citizens are involved with the cultural activities of their communities; e.g., drama, film, literature, art, music. Colleges in the metropolitan areas offer courses whereby the students can attend professional programs en masse with appropriate preparations and post-mortem. Colleges in isolated areas are themselves the centers of culture.

The Culture Buffs are relatively old students, frequently retired. They enroll in one course at a time; e.g., art history (with trips to the local art museum). They care nothing for grades, but might hand in the assignments to please the instructor. They are staunch supporters of the college.

PROTOTYPE N: THE JOCK

Many high school athletes are not "drafted" by four-year colleges either because they are not good enough at their sport, or because they cannot maintain a high enough G.P.A. for inter-

collegiate athletic eligibility. These young men and women frequently matriculate at the community college.

The Jocks are full-time students, taking 12 units or more to be eligible to compete. They are either adequate students (the "Try-Hard" Scholar) or they pass nothing (the "Would-be" Scholar). They are differentiated from their nonathletic counterparts by their reason for enrolling. When asked why he is attending, the Jock is blatant about his real desire,--"to play baseball."

PROTOTYPE O: THE MONEYGRUBBER

Some community college students attend classes for the sole purpose of collecting money from Financial Aids, family, Social Security, the Veterans Administration, or some other governmental agency

The Moneygrubbers are usually under 25 years of age. They are full-time students because that is required for eligibility. They finish the semester, but usually take "Ws" in many of their courses. Next semester, they will be full-time students again.

SUMMARY DISCUSSION OF PROTOTYPES

As in the development of any paradigm for classification, there will be many individuals who don't fit into any category, or who do fit into several. Certainly, no claim is made that the prototypes described above are inclusive or comprehensive. Rather, they represent a beginning, a place to start in describing and explaining what happens in California community colleges.

The data collected the first year of the Statewide Longitudinal Study are certainly sufficient to dispel the myth that:

1. California community colleges are primarily two-year colleges.

2. Most students who matriculate finish their lower division requirements and transfer to a university as juniors.

3. A large proportion of students enroll in and complete a two-year vocational program.

The myth is difficult to destroy because some of the students do carry out the programs listed above. But, considering the hundreds of thousands of potential students who are admitted to California community colleges for the first time each year, the stereotypical two-year program describes the activities of very few.

What, then, is the effect of the $2,000,000,000 spent each year by the 106 community colleges in California?

One procedure for answering this question is the development and validation of a set of prototypes describing the customers served. It is suggested that the list described earlier be tested, added to, deleted from, modified, and generally honed during the 1979-1980 data collection period of the SLS. The result should make it possible to describe the business in which California community colleges are engaged.

Whatever the faults of the prototypes described, some verifiable results of the 1978-1979 data are that many of the first-time students do not fit the stereotypic roles traditionally assigned to them. This is especially true of evening students.

They do not limit their attendance to two years. Many take only one course; many attend sporadically. Many of them, especially those attending for vocational or self-enrichment reasons, are not concerned with obtaining college credits or earning grade points. Vocational students measure their own success in community college by promotions and raises in their jobs. Self-enrichment students measure their success by the amount of learning they accumulate. Those in vocational skill courses rate success on the basis of their new skills; e.g., the business or professional person who learns to tune an automobile or take care of home landscaping.

Inferences from these findings indicate that the usual methods of judging the outcomes of instruction are invalid. If the assumption is made that student failure to receive a credit grade means instructional failure, then community colleges will suffer unnecessary and unfair criticism. The evidence is that, if appropriate and useful evaluations are to be made about instruction in community colleges, alternate or supplementary procedures for judging outcomes must be developed. For students who are not interested in receiving grades for their community college work, this will probably have to involve a measure of student satisfaction with the learning process.

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